

SOME NEW GENERA OF LEAFHOPPERS RELATED TO THAMNOTETTIX.

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The tree and shrub inhabiting leafhoppers that have been referred in the past to the genus *Thamnotettix* are widely separated from the type of that genus and belong to a number of very distinct groups, part of which are herein named and defined.

Genus *Idiodonus* Ball n. gen.

Head narrower than pronotum, the vertex short, blunt, obtusely rounding and rounding over to front. Head as seen from the side very deep, deeper than the length of vertex and pronotum, face inflated, convex, the upper portion nearly vertical. Elytra long, venation simple, one cross nervure, the antepicalis long and narrow. Whole insect coffin-shaped, the elytra appressed and nearly vertical posteriorly. Species reddish, tawny, coppery or cinereous peppered with red. Vertex with two round spots just over the margin or peppered with red or both, often a narrow ivory band on pronotum and ivory lines on claval sutures. Usually a broad ivory or subhyaline margin to elytra, no "saddle."

Type of the genus *Thamnotettix kennicotti* Uhler.

This genus will include a very distinct group of tree or shrub inhabiting forms, including the list from *kennecotti* to *kirkaldyi*, which usually show metallic coloring and red spotting, a blunt head with two spots, a narrow ivory collar and triangle and a hyaline costa. The external genitalia are so near alike as to be of little assistance in separating species.

Genus *Colladonus* Ball n. gen.

Resembling *Thamnotettix* in venation and general form. Head conical, much narrower than pronotum, longer and more pointed but not as deep as in *Idiodonus*. Elytra appressed posteriorly giving a triangular appearance. Female segment usually deeply emarginate with a strap-shaped projection; male plates together long spoon-shaped. General color black, brown, or golden with metallic iridescence, usually with two black spots on vertex, an ivory collar or saddle or both and a hyaline or ivory costal area.

Type of the genus *Thamnotettix collaris* Ball.

This genus will include the group of highly ornamented typically tree and shrub feeding forms from *clitellarius* to *belli*, the greater number of which can be recognized at once by the broad collar or saddle or both.

Genus **Conodonus** Ball n. gen.

Resembling *Colladonus* in the narrow conical head, the closely appressed elytra and in the metallic golden and brown colors but entirely lacking the spots on vertex margins, the collar, the saddle and with only a trace, if any, of the hyaline costal area. They all have the excavated female segment and the elongated spoon-shaped male plates.

Type of the genus *Thamnotettix flavocapitatus* Van Duzee.

This genus includes another group of typically tree and shrub inhabiting species that, like *flavocapitata* and *juanata*, are almost uniform in coloring throughout while *aureolus* is brown with white elytra.

Genus **Gloridonus** Ball n. gen.

Resembling *Conodonus* but with a broader head, head as broad as the pronotum, bluntly conically pointed, acutely angled with the face. Elytra long, appressed, but inclined to flare a little towards apex. Venation typical *Thamnotettix* type. Genitalia widely differing from the "strap and spoon" type of *Conodonus*. The female segment truncate or emarginate in which case the emargination is heavily black bordered; male plates nearly flat long triangular or short, the spines on the last abdominal segment often long, exceeding the pygofers and plates. The styles of the type species are much like the horns on a water buffalo and curve around the tips of the plates.

Type of the genus *Thamnotettix gloriosus* Ball.

This genus includes the "g" group of iridescent golden or greenish tree or shrub inhabiting species nearly all of which have the ovipositors black in sharp contrast.

Genus **Doleranus** Ball n. gen.

Smaller, narrower and more conically headed than typical *Thamnotettix* with the simple venation of that genus but with the central anteapical cell somewhat constricted and then enlarged before the apex, the apical cells shorter than in *Conodonus*. The face has a large number of short arcs, the

vertex a broken submarginal brown line and traces of crescents, pot hooks or ovals on each side of the disc. The pronotum has an irregular row of submarginal spots. The scutellum has two dots on the disc and the elytra have the veins margined with dark or the pigment aggregated into a few spots mostly on or adjacent to cross nervures and junctions. Any or all of these markings may be obscure. The female segment is usually emarginate but without a strap-like projection. The male plates are short or triangular but not folded up into a spoon-like structure.

Type of the genus *Thamnotettix longula* G. & B.

This group which includes *perspicillatus* O. & B. and a number of southwestern species, has affinities with *Recilia* Edw. on one hand and the recently described *Arundanus* of De Long on the other. The latter genus not only has the central anteapical cell constricted but also divided, and two cross nervures as well, while this group still retains the simple venation.

Genus *Ollarianus* Ball n. gen.

Resembling *Doleranus* but with a shorter broader head as wide as the pronotum. The vertex nearly twice as wide as the median length, nearly parallel margined. Resembling *Eutettix* but with the face rounder, the vertex shorter, with an inverted crescent of four black spots, the two outer ones larger and adjacent to the ocelli. There are usually two round black spots on the pronotum behind the eyes and a smaller pair on the margin of the scutellum before the apex. The species are golden or golden-green iridescent with the elytra subhyaline.

Type of the genus *Eutettix balli* Van Duzee.

This is another southwestern group containing a number of species, that is apparently related to *Recilia* Edw. and has branched off from a *Doleranus perspicillatus*-like ancestry to approach the *Eutettix* type of structure while retaining the spotting of the ancestral group.

Genus *Allygianus* Ball n. gen.

Large heavy bodied smoky brown or golden iridescent. Somewhat resembling *Allygus* but differing materially in most structural characters and entirely lacking the almost *Phlepsi*-like vermiculations of that group. Head as wide as pronotum but not as wide as the broad slightly flaring elytra. Vertex relatively short, broad and almost flat, acutely angled with

the straight profile of face. Elytra inclined to be broad and flaring, venation strong with several cross nervures between the sectors and a large number of strong cross nervures on both clavus and corium. The nervures broadly and definitely light with dark margins, forming a large number of conspicuous quadrangular cells instead of weak and obscure, and inclines to have oblique cross-nervures as in *Allygus*.

Type of the genus *Thamnotettix gutturosus* Ball.

This is a small but very distinct western group without any very close affinities in the European or North American faunas.

Genus *Pasadenus* Ball n. gen.

Resembling *Allygianus* in the broad flat vertex and angle with face. Elytra still longer and more flaring, with broad almost truncate apices. Venation weak and obscure, much obscured by the distinct pattern of markings. Several cross-nervures between the sectors and weak reticulations on apical part of corium. Female segment emarginate but lacking the strap of *Colladonus*. Species highly ornamented, three brown bands, an ivory head and claval "saddle."

Type of the genus *Thamnotettix pasadenus* Ball.

Another very distinct western group which resembles the species of *Colladonus* but widely separated by structure, venation and genitalia.

Genus *Friscananus* Ball n. gen.

Small narrow headed species with conically pointed vertices and appressed elytra. Resembling *Colladonus* but with two or more cross-nervures between the sectors, a constricted central anteapical which is usually divided. In this character it approaches *Arundinus* De Long but that group has broader elytra with definite venation while these are irregularly reticulate and have the more conical vertices and the "strap and spoon" genitalia of *Colladonus*.

Type of the genus *Thamnotettix intricatus* Ball.

Another small western group of closely related forms approaching *Aligia* in some characters but apparently from a very different line of development.